

Introducing.....

VIA Isaiah Architecture

*An entirely-new x86 microarchitecture that brings a
2-4X performance boost within the same power
envelope as the VIA C7 processor*



VIA Technologies, Inc.

VIA Isaiah Architecture Highlights

- World's most power-efficient x86 architecture
- Ultra modern 64-bit superscalar, speculative, out-of-order microarchitecture
- High-performance computation and media processing
- Advanced power and thermal management
- Enhanced VIA PadLock™ hardware security features
- Extends VIA C7™ and VIA Eden™ Processor range

Ultra-Modern Microarchitecture

- Superscalar and Out-of-Order
- Macro-Fusion and Micro-Fusion Functions
- Powerful Execution Units
- Advanced Pre-Fetching and Branch Prediction
- Full 64-bit Instruction Set
- New Virtual Machine Architecture



High-Performance Computation and Media Processing

- Initial Products Scalable to 2.0GHz
- 800MHz FSB Scalable to 1333MHz
- Two Large 64KB level-1 caches with higher hit rate
- 1MB exclusive L2 cache with 16-way associativity
- World's fastest floating-point adds and multiplies
- Single-cycle 128-bit Streaming Media Processing



Advanced Power & Thermal Management

- Aggressive Management of Active Power
- Low Power Circuit Design Technology
- Low Power 65 Nanometer Manufacturing Process
- New C6 State for Powering Off Caches
- Adaptive PowerSaver™ Technology
 - Unique TwinTurbo PLL implementation
 - New die temperature monitoring mechanisms

Enhanced VIA PadLock™ Hardware Security Features

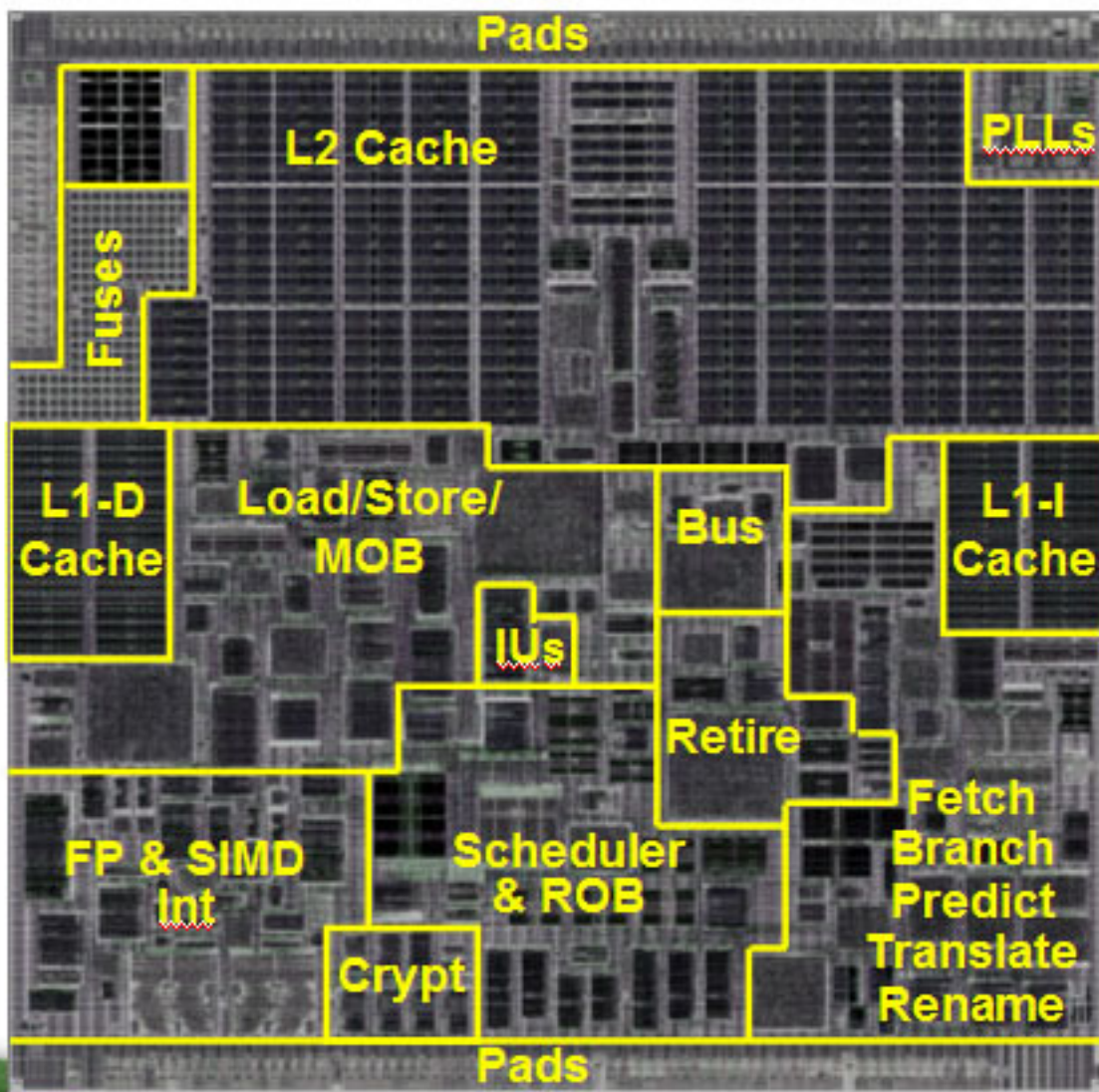
- Random Number Generator
- AES Encryption
- SHA-1 & SHA-256 secure hashing and random number generation
- New Specialized “Secure Execution Mode”

Extends VIA Processor Range

- First products pin and socket compatible with VIA C7™ processor
- Enables OEMs to offer wider range of products for different market segments
- Enables rapid adoption of VIA Isaiah architecture
- VIA C7™ and VIA Eden™ product lines will continue to serve the market

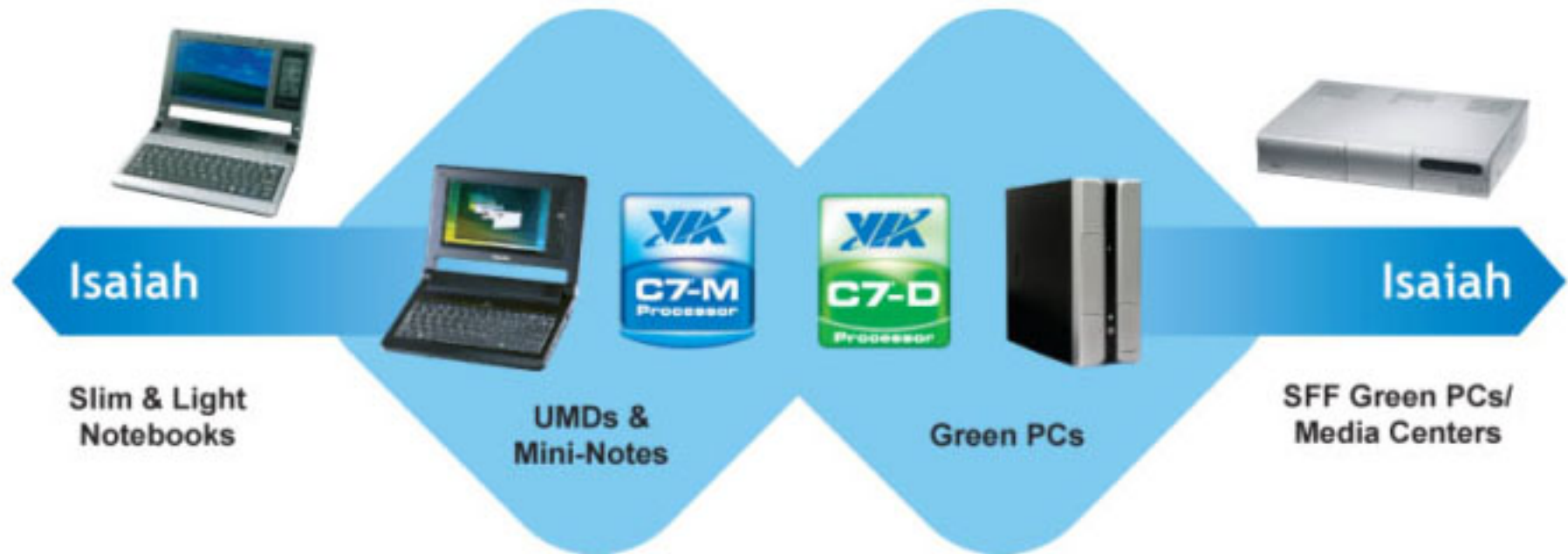
First Isaiah Products Mid-2008

- Fabricated in low-power 65nm
- Single CPU core
- Clocks to 2GHz
- FSB up to 1333Mhz
- SSSE3 Instructions
- Pin-compatible with VIA C7™
- Extends VIA product lines - does not replace VIA C7™ and VIA Eden™ Processors



VIA Isaiah Architecture

Initial Target Market Segments



Conclusions

- **VIA Isaiah Architecture sets the power-efficiency standard for tomorrow's Immersive Mobile Internet**
 - World's most power-efficient x86 processor architecture
 - Ultra modern functionality
 - 2-4X increase in performance in the same power envelope
 - Extends VIA C7™ and VIA Eden™ product lines
 - Flexible future scalability

Thank you



VIA Technologies, Inc.